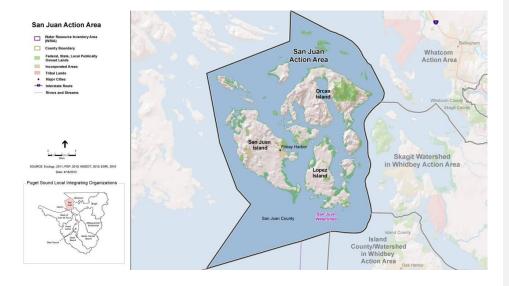
The Action Agenda in the San Juan Islands

Profile

Located at the nexus of the Strait of Juan de Fuca, the Georgia Strait, and Puget Sound, the 428 separate islands (at high tide) that make up San Juan County are considered by many to be the crown jewels of Puget Sound. San Juan County has the smallest land mass of any county in Washington State, but with 408 miles of marine shoreline, has more than any other county in the contiguous United States.

Geologically, the San Juan Islands are distinctly different from mainland Washington and Vancouver Island, and are dominated by bedrock and thinner glacial deposits relative to other parts of Puget Sound. Their unique location in the crossroads of the Salish Sea gives the San Juan Islands a wide diversity of flora and fauna. High-energy tidal flows and turbulent mixing throughout the Islands' channels are dominated by the surface outflows from the Strait of Georgia and the deep water inflow from offshore Pacific waters. The Islands' straits and channels link the Strait of Georgia to the Strait of Juan de Fuca, and to a lesser extent to Puget Sound. These water sources mix and contribute to the distribution of nutrients, plankton, sediment, and pollutants throughout the Islands, creating a marine environment unique to the San Juan Islands. This environment includes not only turbulent straits and channels but also some quiet and protected bays.



San Juan County is affected by the "rainshadow" of the Olympic Mountains, and receives 20 to 30 inches of annual rainfall, with significant variation of rainfall patterns among the island's microclimates. There are no major rivers on the San Juan Islands, but several small creeks flow on a year-round basis. Additionally, the Fraser River in British Columbia influences the temperature and sedimentation in San Juan County waters. Only one percent of the land is paved, and 61 percent is forested. Lakes and freshwater wetlands cover over seven percent of the landscape.

The economy of the San Juan Islands has shifted along with the culture, technology, and natural resources in the region. The Salish Peoples' fishing activities were sustainable for generations, and traditional knowledge includes areas where salmon skirted the Orcas Island shoreline as vast runs returned to the Fraser and Skagit rivers. The Coast Salish also knew where to find the best clam, mussel, and oyster beds near shore for ready harvest in season.

Agriculture, logging, fishing, and lime kiln operations later became the main economic drivers for the islands. In the late nineteenth century, the economy boomed with fruit, canned salmon and peas, and lime exports to the mainland. These industries began to collapse as mainland infrastructure improved and it became cheaper to deliver goods overland from the eastern part of the state rather than across waters. It also became much easier to can or freeze and ship salmon from the mainland, contributing to the decline of the fishing industry and associated canning operations by the mid-1900s. The cannery in Friday Harbor was canning peas when it closed in 1966.

Today, the San Juan Islands are an extremely popular summer destination, and the number of residents swells from 15,769 who live there year-round to approximately double that in the summer. In addition, over 750,000 visitors camp, moor, or stay in area lodging. Most of the county is rural, with 75 percent of the population living outside the "urban" areas of Friday Harbor, Eastsound, and Lopez Village. Over the past decade, population growth in the islands has been high, with a growth rate of 12 percent from 2000 to 2010. There are 5,700 shoreline parcels in San Juan County, of which approximately 50 percent have already been developed. Some islands have no public access and few accommodate automobiles. Public access to the water is extremely limited on many islands.

The current economy is driven by residential and commercial construction, tourism and government (including schools). Tourism is highly dependent on the clean marine and fresh water, spectacular views, and opportunities for boating, bird watching, whale watching and cycling. These characteristics are also highly valued by the residents and second home-owners that make the San Juan Islands their home. There is significant marine oriented commerce including marinas, fishing, boat building and repair. Representative marine education and research from organizations include the University of Washington Friday Harbor Labs, SeaDoc Society, and

Notable Accomplishments

Seven acres of coastal salt marsh and two acres of a tidal lagoon have been restored in San Juan County.

Eleven miles of surf smelt and sandlance habitat in the San Juans has been documented.

All feederbluffs, eelgrass, kelp, forage fish, and shoreline modifications in San Juan County have been documented.

Tidal inundation to Cascade Creek was restored with a new Buck Bay Bridge.

The Spring Street Rain Garden demonstration project was installed.

Seattle Pacific University marine labs. High quality shellfish farming occurs in San Juan County and there is a growing sustainable agricultural movement. The islands are important to the cultural heritage of the coastal Salish tribes that retain treaty reserved right to hunt, fish and gather, and are attached to many cultural heritage sites.

Unique Ecosystem Characteristics and Assets

Public involvement in the stewardship of the San Juan Islands is considered by area residents to be one of their foremost ecosystem assets. There are many government and non-governmental efforts devoted to protecting this important natural resource. The San Juan Preservation Trust is the oldest private land trust in Washington State. The San Juan County Land Bank protects natural areas and is the only county-based land bank in the state. In 2007, the San Juan County Council adopted the San Juan County Marine Stewardship Area Plan, the culmination of three years of effort by the San Juan Marine Resources Committee, with contributions from numerous scientists, technical advisors, resource managers, community leaders, business owners, and citizens. The Marine Stewardship Area Plan is intended to sustain the many services that the ecosystem provides for county citizens, fish and wildlife, and the economics of the County.

Example assets include sustainable tourism, commercial and recreational fisheries for clams, crab and spot prawns, and clean beaches and waters. There are currently no beaches in the San Juan Islands that are closed to swimming. However, public beaches are periodically closed to shellfish harvest due to a naturally-occurring marine biotoxin which can cause paralytic shellfish poisoning. Protected upland areas are located at Moran State Park, San Juan Historical National Park, Turtleback Mountain, Lopez Hill, University of Washington Preserves at Friday Harbor Labs and on Shaw Island, and the National Wildlife Refuge with sites throughout the islands. Yellow Island, protected by the Nature Conservancy, contains an intact prairie, a unique ecological feature on a small island that is approximately one acre in size. Marine resource protection areas include the Marine Preserve, National Wildlife Refuge, Bottomfish Recovery Zone, Whalewatch Exclusion Zone, and Sensitive Eelgrass Area.

The location of the San Juan Islands makes them a way-station for all 22 migrating populations of Puget Sound Chinook salmon as both juveniles and adults. Additionally, Sockeye, Pink, Chum and Coho salmon, Kokanee, Steelhead, and Rainbow and Coastal cutthroat trout have been documented in the County. The San Juan Islands support outmigrating juvenile salmon including: Chinook, Coho, Chum and Pink, and stocks from the Fraser River, Puget Sound and east and west coast Vancouver Island and the Strait of Georgia. Although most of the streams in San Juan County are small and do not support salmon, a small number of Coho have recently been reported spawning in Cascade Creek and possibly other streams on Orcas Island, and a few creeks support cutthroat and introduced runs of Chum.

San Juan County provides excellent habitat for juvenile and adult salmon with over 5,000 acres of tidal wetlands, inter- and sub-tidal flats, eelgrass meadows along the shorelines and in the bays, and kelp beds. Tidal wetlands are highly valued due to their relative scarcity. At least 80 miles of potential forage fish spawning beaches are present. Eelgrass is found on 20 percent of all shorelines, and the San Juans contain one-third of all of the kelp in Puget Sound. Pacific surf smelt and sandlance have been documented on 11 miles of all shorelines. The geology has created habitat conditions for rockfish that are not replicated anywhere else in Puget Sound. Approximately 74 percent of the shallow dominant rocky reef habitat in Puget Sound, comprised of boulder fields, rocky ledges and outcroppings, is found in the San Juan Archipelago.

Local Action Agenda Process

The San Juan Action Agenda Oversight Group (AAOG), the local integrating organization (LIO) for the area, developed a Prioritization Framework to guide the update to the local Action Agenda. The framework formed the basis of update work from January-October of 2011. The group used the 2008 San Juan Action Agenda as a starting point, identifying key gaps in the original profile. A workshop was held to link pressures on the ecosystem to ecosystem benefits in the San Juans. Local ecosystem benefits included most, but not all, Soundwide Recovery Targets. Linkages were used to rate pressures based on the scope, severity, and irreversibility of the impact on each ecosystem benefit. Ratings guided the selection of pressures with a "high" threat. Strategies and near-term actions were then refined from the 2008 profile that – at minimum – addressed the highest ranked pressures, considering both feasibility and potential impact. Development of these priority pressures and strategies involved regular meetings of the Action Agenda Oversight Group committees (described below), and included presentations before the San Juan County Council. In October 2011, the Action Agenda Oversight Group co-hosted a public open house on the San Juan Inter-Island Ferry, seeking feedback on the priority near-term actions.

Key Threats/Pressures

The San Juan Action Agenda Oversight Group identified the following three key pressures on the San Juan ecosystems:

- Major oil spills;
- Runoff from the built environment (including septic systems); and
- Shoreline development (including armoring).

Opportunities, Priorities, and Near-Term Actions

The San Juan Action Agenda Oversight Group identified seven priority (Tier 1) strategies and ten near-term actions to address three key pressures on the San Juan ecosystems. The priority strategies were honed from a more comprehensive list of strategies that were all considered important in addressing the local pressures. Furthermore, the San Juan Action Agenda Oversight Group recognizes that in order to be most successful, many of the strategies will need to be implemented together, which is the approach that will be taken at the local level. The strategies are listed below (in no particular order), and will guide the local near-term actions.

Strategies and near-term actions represent agreements between the County and represented tribes at the time this plan was developed. To be implemented, several near-term actions indicated below will require additional outside funding and local policy decisions, which must be weighed against opportunity costs. Funding needs as of February 2012 are specified per action.

PRESSURE ON THE ECOSYSTEM	TIER 1 STRATEGY	TIER 1 NEAR-TERM ACTION*	ESTIMATED COST THROUGH 2014 (\$TOTAL & \$GAP)
Major Oil Spills	Work with the Puget Sound Partnership on oil spill prevention and readiness programs within Puget Sound and with Canada.	San Juan Marine Resources Committee will convene 20 agencies and non-governmental organizations responsible for oil spill prevention and readiness at the 2012 Marine Manager Workshop, including participation from the local, state, federal, and Canadian organizations. Workshop outcomes will include a list of agreed upon recommendations for oil spill prevention. Local jurisdictions will consider adopting highest priority recommendations within their authority by 2014.	Fundraising occurs annually. Total Cost: \$11,782 Gap: \$0 Note: Funding is provided through grants. Cost does not include in-kind support of meeting attendees, including Marine Resources Committee (MRC) members.
	Maintain local oil spill readiness and response programs in alignment with a regional readiness and response program.	Islands Oil Spill Association (IOSA) will maintain local oil spill readiness and response programs through 2014. Identify remaining local response needs at the 2012 Marine Managers Workshop and consider these, along with a funding and action plan, as part of the workshop recommendations.	Fundraising occurs annually Total Cost: ~\$250,000 Note: Costs are dependent on spill activity.
Runoff from the Built Environment (including septic systems)	Create effective compliance mechanisms for stormwater.	San Juan County Community Development and Planning Department (CDPD) and the Town of Friday Harbor will improve stormwater permit review process with predisturbance site review and follow-up site visits to 50 percent of properties permitted between 2012-2014.	Funded through 2013: Total Cost: ~\$27,500 Gap: ~\$7,500 (County). Note: Funding includes Town and County. County Funded for \$15,000 out of current fees. The Town is funded at ~\$5,000.
	Implement best management practices to reduce pollution of source wastes by residential runoff and non-point sources.	San Juan County Health and Community Services will fully implement the On-site Sewage System (OSS) Operation and Maintenance Program Plan, with a goal of 100 percent of systems in sensitive areas in compliance and current with inspections by 2014 and 60 percent of alternative systems county-wide to have inspections between 2010-2014.	Partially funded Total Cost: ~\$700,000- \$800,000 Gap: ~\$481,000-\$582,000 Note: Current funding includes federal and state grants through 2013 and local fees

PRESSURE ON THE ECOSYSTEM	TIER 1 STRATEGY	TIER 1 NEAR-TERM ACTION*	ESTIMATED COST THROUGH 2014 (\$TOTAL & \$GAP)
		San Juan County Public Works will convene CDPD, Department of Health and Community Services (DHCS), and the San Juan Islands Conservation District (CD) to identify and coordinate best management practices for stormwater, on-site septic systems, and animal wastes with community participation by 2013. CDPD, DHCS, CD, and the Town of Friday Harbor will publicize information by the second quarter of 2014 at the DHCS, CDPD, and Town permit counters and associated websites, with a goal to target 100 percent of applicants by the end of 2014. San Juan County will provide for identified best management practices in County Code by 2014.	Partially funded Total Cost: \$60,000- \$62,500 Gap: \$5,000-\$7,500 Note: Funding gap is for publicizing technical assistance materials
		San Juan County Public Works Stormwater Utility will lead and work jointly with the Stormwater Committee, the Water Resources Committee, the Marine Resources Committee, and the Town of Friday Harbor to implement an annual strategic monitoring plan by 2013 to measure levels of fecals, heavy metals, POPs, and PAHs in priority basins. In the first year post-implementation, monitor 100percent of priority basins, with monitoring actions ongoing after 2014.	Funded at a minimum level (for priority basins) Total Cost: \$250,000+ Gap: Additional costs dependent on level of testing desired.
Shoreline Development (including shoreline armoring)	Provide information and work with landowners regarding the importance of retaining and restoring native vegetation, trees and ground cover and geologic processes.	San Juan CDPD and the Town of Friday Harbor will make ongoing technical assistance (best management practices) available on-site to 100 percent of permit applicants, with a goal of 75 percent of customers avoiding hard armoring or otherwise implementing soft armoring techniques by 2014. This work will leverage the effort underway via EPA grant funding and shoreline workshops coordinated by Friends of the San Juans, San Juan Islands Conservation District, and Washington Sea Grant.	Fully funded for County and Town through 2013 (pending grant approval) Total Cost: \$63,000 (County and Town) Note: Costs for the Town of Friday Harbor are \$\times 1,000\$. Funding plan beyond 2013 is in development.

Improve on compliance and enforcement capacity.	San Juan CDPD and the Town of Friday Harbor will provide capacity for technical assistance related to compliance with environmental regulations by 2013.	Fully funded for County through 2013 Note: See related action above
Identify and implement shoreline protection tools including land preservation via acquisition and conservation easements,	San Juan County Lead Entity for Salmon Recovery will target funding to highest Tier I salmon recovery projects between 2012- 2014, as listed in the San Juan Salmon Recovery three-year work plan for WRIA 2. Projects include acquisition and conservation easements, protection and restoration actions.	Partially funded \$720,000 available. Note: Total costs through 2014 will be project- dependent and available beginning in 2013.
restoration, and protection of marine areas consistent with treaty rights.	San Juan County Lead Entity for Salmon Recovery will identify priority habitats for acquisition by 2013 in updates to the Salmon Recovery strategy, and will lead acquisition of, or establishment of conversation easements for 25 percent of priority habitat shoreline miles with willing sellers/owners by 2014.	Partially funded \$308,650 available Note: Total costs will be clarified in updates to strategy by 2013.

Following is a list of "Tier 2" strategies and accompanying draft actions. The San Juan Action Agenda Oversight Group identified these strategies and actions as important for local recovery of Puget Sound as part of the Action Agenda, and are recommended for consideration immediately after Tier 1 strategies and actions have been implemented. Some Tier 2 actions are being pursued at this time, while others may be developed and implemented as additional funding and/or capacity is available and consideration is given to public comment and opportunity costs.

PRESSURE ON THE ECOSYSTEM	TIER 2 STRATEGY	 TIER 2 ACTION
Major Oil Spills	Work with the Puget Sound Partnership on oil spill prevention and readiness programs within Puget Sound and with Canada. (Same as Tier 1 above)	 Gather information on pollutant levels in beach sediments, as baseline data for potential oil spill impacts (freeze samples to avoid upfront payment for chemical analysis). Emphasize risk-based analyses to improve marine safety. (Vessel traffic risk analysis) Work with Islands Trust on Oil Spill readiness, prevention, and response priorities

PRESSURE ON THE ECOSYSTEM	TIER 2 STRATEGY	TIER 2 ACTION
	Maintain local oil spill readiness and response programs in alignment with a regional readiness and response program. (Same as Tier 1 above)	Update Geographic Response Plan with most current data from salmon recovery assessments Support Coast Guard Re-Authorization Act Incorporate current readiness and response program into the vessel of opportunity program
Runoff from the Built Environment (including septic systems)	Restore native vegetation, trees, and ground cover.	Specific actions will be developed and implemented as additional funding and/or capacity is available and consideration is given to public comment and opportunity costs.
	Provide information to landowners about pollutants around the home and farm and provide information on proper storage and care.	Specific actions will be developed and implemented as additional funding and/or capacity is available and consideration is given to public comment and opportunity costs.
	Encourage Low Impact Development for new development and retrofits.	Specific actions will be developed and implemented as additional funding and/or capacity is available and consideration is given to public comment and opportunity costs.
	Provide information and work with the public regarding Low Impact Development (LID) so they can implement LID on their own properties, including farms.	Specific actions will be developed and implemented as additional funding and/or capacity is available and consideration is given to public comment and opportunity costs.
	Ensure coordination between planning and health departments on issuance of septic permits.	Specific actions will be developed and implemented as additional funding and/or capacity is available and consideration is given to public comment and opportunity costs.
	Implement San Juan Marine Stewardship Area Monitoring Plan, including the Stormwater Monitoring Plan.	Specific actions will be developed and implemented as additional funding and/or capacity is available and consideration is given to public comment and opportunity costs.
Shoreline Development (including shoreline armoring)	Identify and implement shoreline protection tools including land preservation via acquisition and conservation easements, restoration, and protection of marine areas consistent with treaty rights. (Same as Tier 1 above)	Implement the Green Shores for Homes program

PRESSURE ON THE ECOSYSTEM	TIER 2 STRATEGY	TIER 2 ACTION
	Provide convenient landowner access to technical assistance for maintaining views, shoreline access, and ecological function of the shoreline.	Specific actions will be developed and implemented as additional funding and/or capacity is available and consideration is given to public comment and opportunity costs.
	Shoreline regulatory strategy (update Critical Areas Ordinance (CAO) and Shoreline Management Program (SMP)).	Specific actions will be developed and implemented as additional funding and/or capacity is available and consideration is given to public comment and opportunity costs.
	Implement San Juan Marine Stewardship Area Monitoring Plan.	Specific actions will be developed and implemented as additional funding and/or capacity is available and consideration is given to public comment and opportunity costs.

Link to Recovery Targets

By addressing, at minimum, three of the highest-priority pressures in the San Juans, the Action Agenda Oversight Group expects improvements or protective actions for several Soundwide Recovery Targets. For instance, prevention of major oil spills will prevent further degradation of all or nearly all of the targets related to marine or marine nearshore areas. Near-term actions around runoff from the built environment (including septic systems) are also designed to protect water quality and improve management of on-site sewage systems. Restorative actions and technical assistance to homeowners in the shoreline could result in positive improvements in the amount of shoreline armoring. Overall, the group anticipates benefits to the following targets:

- Eelgrass
- Estuaries
- Marine Sediment Quality
- Orcas
- Pacific Herring
- Shellfish Beds
- Swimming Beaches

- Toxics in Fish
- Wild Chinook Salmon
- Freshwater Water Quality
- Management of On-Site Sewage Systems
- Insects in Small Streams
- Shoreline armoring

Local Implementation Structure

The Action Agenda Oversight Group first convened in July of 2010 and actively participated in the update of the San Juan Action Agenda. The Implementation Committee met monthly between October 2010 and November 2011, including a half-day workshop in May. All meetings were held in Friday Harbor. The Accountability Oversight Committee met four times between January and September of 2011 to discuss the recommendations of the Implementation Committee, with meetings alternating between Friday Harbor and Anacortes.

Participants in the process included the following:

- Accountability Oversight Committee
 - o San Juan County Council
 - o Lummi Nation
 - o Swinomish Tribe
 - Tulalip Tribes
- Implementation Committee
 - o Marine Resources Committee
 - o Salmon Recovery Lead Entity
 - Director of Planning
 - o Director of Public Works
 - o Director of Environmental Health
 - Water Resources Committee (Community Representative)
 - o Tulalip Tribes
 - Lummi Natural Resources
 Department
 - Swinomish Tribe
 - o Conservation District
 - Friday Harbor Laboratories
 - San Juan Stewardship Network/ECO Net
 - o Town of Friday Harbor

IMPLEMENTATION COORDINATION IN THE SAN JUAN ISLANDS

The San Juan Action Agenda Oversight Group (AAOG) is the Local Integrating Organization (LIO) for the San Juan geography, and was officially recognized by the Puget Sound Partnership's Leadership Council in June of 2010.

The Accountability Oversight Committee serves as the executive body for the AAOG, and consists of County Council, tribal, and ex-officio Puget Sound Partnership representatives.

The Implementation Committee consists of staff and volunteers from organizations helping to implement the local Action Agenda. This group provides recommendations to the Accountability Oversight Committee.

References and Additional Resources

Garrigues, R. S.& Litman, T.1990. Lopez Island Test/Observation Well Completion Report. http://www.ecy.wa.gov/pubs/oftr9003.pdf

National Oceanic and Atmospheric Administration. 19 January 2007. Puget Sound Salmon Recovery Plan. Available online at: http://www.nwr.noaa.gov/Salmon-Recovery-Planning/Recovery-Domains/Puget-Sound/PS-Recovery-Plan.cfm

San Juan County Best Available Science for Critical Areas. March 2008. Available online at: http://sanjuanco.com/cdp/Docs/CAO/SJBASChapterl 3 19 08.pdf

San Juan County Best Available Science Synthesis. January 2011. Available online at: http://sanjuanco.com/cdp/docs/CAO/BAS Synthesis 2011-01-13.pdf

San Juan County Marine Resources Committee. 27 June 2011. Draft San Juan County Marine Stewardship Area Monitoring Plan and Strategy. Available online at: http://www.sjcmrc.org/uploads/Monitoringpdfs/MonPlanJun2011forweb.pdf

San Juan County Marine Resources Committee. 2 July 2007. San Juan County Marine Stewardship Area Plan. Available online at: http://www.sjcmrc.org/uploads/pdf/MSA%20plan%2002-Jul-2007%20Final.pdf

San Juan County Watershed Management Committee. April 2000. San Juan County Watershed Management Action Plan and Characterization Report. Available online at: http://www.sanjuanco.com/health/wtrshdpln/part1toc.html

San Juan Initiative. Available online at: http://www.sanjuaninitiative.org/

San Juan Islands Scenic Byway Corridor Management Plan. 2012, in prep. Sections of the plan are posted at: http://www.visitsanjuans.com/scenicbyway/

Town of Friday Harbor Shoreline Master Program Update. Available online at: http://www.fridayharbor.org/SMP/smp.htm

Town of Friday Harbor Water Conservation Plan. Available online at: http://www.fridayharbor.org/town%20documents/water-conservation-plan.htm

Watershed Resource Inventory Area (WRIA) 2. June 2005. San Juan County Salmon Recovery Chapter - Puget Sound Shared Strategy Plan. Available online at: http://www.sharedsalmonstrategy.org/plan/vol2.htm

http://www.sanjuanco.com/Planning/docs/CompPlan/SectionA 2010-04.doc.pdf

http://sanjuanco.com/health/wtrshdpln/part2chap2.html

http://www.nwr.noaa.gov/Salmon-Recovery-Planning/Recovery-Domains/Puget-Sound/upload/Ch5 SanJuan.pdf

http://sanjuanco.com/health/wtrshdpln/part2chap2.html

http://www.co.san-juan.wa.us/health/wtrshdpln/part2chap3.html

http://www.historylink.org/index.cfm?DisplayPage=output.cfm&File Id=2629

http://www.sjcmrc.org/uploads/pdf/MSA%20plan%2002-Jul-2007%20Final.pdf

http://www.tpchd.org/files/library/3f99dac18	661fbba.pdf	
The Market of th		
http://wildliferecreation.org/our-campaigns/v	vwrp-projects/counties/San%20Juan_county	
http://www.nature.org/ourinitiatives/regions	/northamerica/unitedstates/washington/placesweprotect	
/yellow-island.xml	Thorthamerica/uniteustates/washington/placesweprotect	
<u> </u>		
Action Agenda — July 2, 2012	How Local Areas Are Working to Protect and Recover Puget Sound – Page 341	